

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 223 3-1450 www.uspto.gov

ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO. Q76826 08/06/2003 Masahiko Kataoka 10/634,762 EXAMINER 7590 07/27/2004 21171 CHANG, CHING STAAS & HALSEY LLP SUITE 700 ART UNIT PAPER NUMBER 1201 NEW YORK AVENUE, N.W. 3748 WASHINGTON, DC 20005

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	1 1
		10/634,762	KATAOKA ET AL.	
Oi	fice Action Summary	Examiner	Art Unit	
		Ching Chang	3748	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠ Resp	onsive to communication(s) filed on <u>18 Ju</u>	<u>une 2004</u> .		
2a)⊠ This a	action is <b>FINAL</b> . 2b)☐ This	action is non-final.		
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of	Claims			
4)⊠ Claim 4a) Of 5)⊡ Claim 6)⊠ Claim 7)⊡ Claim	(s) <u>1-10</u> is/are pending in the application the above claim(s) is/are withdraw (s) is/are allowed. (s) <u>1-10</u> is/are rejected. (s) is/are objected to. (s) are subject to restriction and/o	wn from consideration.		
Application Pa	pers			
9)∐ The sp	pecification is objected to by the Examine	er.		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.				
Applic	ant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).	
•	cement drawing sheet(s) including the correct ath or declaration is objected to by the Ex			
Priority under	35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachme=t(=)				
Attachment(s)  1) Notice of Ref	erences Cited (PTO-892)	4) Interview Summary	(PTO-413)	
2) Notice of Dra 3) Information D	ftsperson's Patent Drawing Review (PTO-948) Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Mail Date	Paper No(s)/Mail Da	ate	)-152)

Art Unit: 3748

#### **DETAILED ACTION**

This Office action is response to the amendment filed on June 18, 2004. New claims 7-10 are added as requested.

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent 5,682,847) in view of Bloomfield (US Patent 2,439,415), Siegla (US Patent 4,249,488), and Sheldon (US Patent 5,960,617), and further in view of Okubo et al. (US Patent 6,601,555).

Hara discloses a rocker arm (4, 5) capable of being rockingly driven by a cam (12, 13) for selectively opening and closing a valve (1) mounted on a cylinder head of an internal combustion engine, which rocker arm comprises: an arm body having first and second ends opposite to each other (See Fig. 1), the first end of the arm body having an internally threaded hole (4A, 5A) designed therein; an adjustment screw (7) which serves as a pivot member including a pivot piece provided at one end thereof or a valve drive member, the adjustment screw being threaded into the internally threaded

Art Unit: 3748

hole in the first end of the arm body with one end portion of the adjustment screw protruding outwardly from the first end of the rocker arm; wherein the adjustment screw has one end provided with a valve drive piece and wherein the arm body is supported at a generally intermediate portion thereof for rocking motion and a roller (10A, 10B) engageable with the cam is fitted to the second end of the arm body.

Hara discloses the invention, however, fails to disclose the adjustment screw being fixed relative to the arm body by means of a structure selected from the group consisting of a first structure in which two nuts are threaded onto such one end portion of the adjustment screw in overlapping relation with each other, a second structure in which a flanged nut is threaded onto such one end portion of the adjustment screw, and a third structure in which a nut is threaded onto such one end portion of the adjustment screw with a washer intervening between such nut and the first end of the arm body.

The patent to Bloomfield on the other hand, teaches that it is conventional in the lock nut art, to utilize a lock nut (22) to protect the nut (12) against loosening from the blot (10).

The patent to Sheldon on the other hand, teaches that it is conventional in the fastener art, to utilize a flanged nut (71) having a flat annular end face to secure a blade to a bolt (70).

The patent to Siegla on the other hand, teaches that it is conventional in the valve lift adjusting device art, to utilize a nut (84) and a washer (83) to secure a bracket arm to a stud (81).

Art Unit: 3748

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the lock nut, the flanged nut, and the nut with a washer as taught by Bloomfield, Sheldon, and Siegla, respectively, in the Hara device, since the use thereof would provide an improved rocker arm assembly with a better locking security among its components.

The modified Hara, however, fails to disclose the arm body being represented a generally inverted U-sectioned configuration and prepared from a single plate metal by means of a press work.

The patent to Okubo on the other hand, teaches that it is conventional in the sheet metal rocker arm art, to manufacture a sheet metal rocker arm (31), wherein the arm body is prepared from a single plate metal by means of a press work to represent a generally inverted U-sectioned configuration including a pair of opposite side wall (22), and a connecting wall (24) bridging between the opposite side walls; and a roller (through 18) engageable with the cam is fitted to a portion generally intermediate of the arm body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the sheet metal rocker arm as taught by Okubo in the modified Hara device, since the use thereof would provide a light weight and cost effective valve actuating device.

Art Unit: 3748

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon, further in view of Okubo (as applied to claim 3/1), and further in view of Nagano et al. (US Patent 5,678,305).

The modified Hara device, however, fails to disclose the threaded hole being defined in a first end portion of the connecting wall of the arm body.

The patent to Nagano on the other hand, teaches that it is conventional in the sheet metal rocker arm art, to manufacture a sheet metal rocker arm (6), with a threaded hole (24) being defined in a first end portion of the connecting wall (14, 14a) of the arm body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the sheet metal rocker arm with a threaded hole in its first end portion of the connecting wall as taught by Nagano in the modified Hara device, since the use thereof would provide an improved valve actuating device.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon, further in view of Okubo (as applied to claim 1), and further in view of Wing (US Patent 4,790,703).

The modified Hara device, however, fails to disclose the flanged nut having a counterbore.

The patent to Wing on the other hand, teaches that it is conventional in the fastener art, to utilize a flange nut (12) having a counterbore (70).

Art Unit: 3748

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized flange nut as taught by Wing in the modified Hara device, since the use thereof would provide an improved rocker arm assembly with an alternative, secured flange nut.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon, further in view of Okubo (as applied to claim 1), and further in view of Isler (US Patent 4,790,703).

The modified Hara device, however, fails to disclose the flanged nut having an annular spherical end face.

The patent to Isler on the other hand, teaches that it is conventional in the fastener art, to utilize a flange nut (15) having an annular spherical end face (17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized flange nut as taught by Isler in the modified Hara device, since the use thereof would provide an improved rocker arm assembly with an alternative, secured flange nut.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon, further in view of Okubo (as applied to claim 1), and further in view of Kimak (US Patent 4,990,044).

The modified Hara device, however, fails to disclose the flanged nut having an annular conical end face.

Art Unit: 3748

The patent to Kimak on the other hand, teaches that it is conventional in the fastener art, to utilize a flange nut (10) having an annular conical end face (12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized flange nut as taught by Kimak in the modified Hara device, since the use thereof would provide an improved rocker arm assembly with an alternative, secured flange nut.

## Response to Arguments

7. Applicant's arguments filed on June 18, 2004 have been fully considered but they are not persuasive.

Specifically, by referring to the Attorney's contention "Applicants respectively submit that none of Hara......disclose or suggest "an rocker arm body, prepared from a single plate metal by a press work "(See Page 7, Attorney's REMARKS), the Examiner disagrees. As a mater of fact, when a product by process claim is rejected over a prior art product such as that shown in Hara, which appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See In re Marosi, 218 USPQ 289 (Fed. Cir. 1983). Additionally, the Okubo reference does teach to manufacture a sheet metal rocker arm (31), wherein the arm body is prepared from a single plate metal by means of a press work to represent a generally inverted U-

Art Unit: 3748

sectioned configuration including a pair of opposite side wall (22), and a connecting wall (24) bridging between the opposite side walls (See ABSTRACT; Figs. 1-18).

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the invention as defined in amended claim 1 is advantageous over the conventional arm body, prepared from a single plate metal by means of a press work, in that the claimed structure allows the adjustment screw 7 (7A) to be more fixedly locked in position without loosening, regardless of limited wall thickness of the arm body 4 (4A). (See Page 7, Attorney's Remarks)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

#### **Conclusion**

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - Harris (US Patent 6,749,386).
  - Beemer et al. (US Patent 6,027,293).
  - Collins (US Patent 3,030,997).

Art Unit: 3748

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (703)306-3478. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703)308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Art Unit: 3748

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Ching Chang

THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700